

*Gibocellum sudeticum*, sp. nov.

Oblongo-ovalis; cephalothorax rufescens, singulis pilis rigidis obtectus, antennis chelatis testaceis, rubentibus, pilosis, cephalothoracem subæquantibus, palpis macilentibus, paululo longioribus, pilosis; hypopodia palporum securiformia; pedes flavescentes, trochanteribus conspicuis, femoribus tibiisque clavatis, tarsis parum incrassatis; pedes antici (pedes maxillares) longissimi; abdomen viride brunneum, superficie inferiore setis plumosis obsitum. Long. corp. 2.5 millim.

## BIBLIOGRAPHICAL NOTICES.

*The Geological Record for 1874. An Account of Works on Geology, Mineralogy, and Palæontology published during the Year.*  
 Edited by WILLIAM WHITAKER, B.A., F.G.S. 8vo. London: Taylor and Francis, 1875.

IF the denizens of the nethermost pit can contemplate the doings of the inhabitants of this world of ours, we should think the fate of a "Recorder" could hardly excite even their envy. Working through paper after paper and book after book, often in search of a minute modicum of valuable grain hidden in bushels of inane chaff, compelled to read and digest articles in which they can take scarcely any interest, and to give something like a notion of their general bearings, is bad enough; but when we consider also that the Recorder's work is never finished, but always growing under his hands, he seems almost as much deserving of pity as the fabled Sisyphus, or the daughters of Danaus, with whom the ancients peopled part of the infernal regions. No one who has not personal experience of the business of "recording" can have the smallest notion of the labour involved in it; and most certainly the students of any science ought to feel deeply indebted to those who will take the trouble to summarize its literature for their benefit.

The 'Zoological Record,' which now covers the literature of ten years, and the well-known reports on zoological literature which have appeared for a much longer period in the 'Archiv für Naturgeschichte' furnish the student of zoology with a digest of the contributions to that science in the publications of each year; but in respect of geological literature we have no similar systematic reports; for the notices of memoirs which appear regularly in Leonhard and Bronn's 'Jahrbuch,' in the 'Zeitschrift für die gesammten Naturwissenschaften,' and in 'Silliman's Journal,' valuable as they are, do not afford any thing like a connected view of the current literature.

Under these circumstances geologists ought to give an enthusiastic welcome to Mr. Whitaker's 'Geological Record,' the first issue of which embraces the literature of Geology, Mineralogy, and

Palæontology published during the year 1874. The names of the contributors are a sufficient guarantee that the different articles, all of which are signed with the initials of the writers, have been well and carefully prepared; and the general arrangement, which we presume to be the work of the chief editor himself, is as satisfactory as, considering the nature of the subjects to be treated of, could reasonably have been expected. The report is divided into a certain number of great sections, such as "Stratigraphical and Descriptive Geology," "Physical Geology," "Mineralogy," "Petrology," "Palæontology," &c., and these, again, into subsections on various grounds; and under each subsection are the references to and analyses of the different books and memoirs relating to it, arranged in the alphabetical order of the authors' names. An excellent Index, occupying 19 pages of three columns each, furnishes a further guide to the contents of the book, and will to a very considerable extent take the place of those cross-references which would have been indispensable had the editor attempted to classify his materials in such a manner as would satisfy all the requirements of all his readers.

In choosing this simple method of arrangement, we think that, except in the department of Palæontology, Mr. Whitaker has exercised a wise discretion. Geological books and memoirs, especially those belonging to his first section, or those on Stratigraphical and Descriptive Geology, may generally be looked at from half a dozen points of view; and the effect of any attempt to embrace the whole of these would be a complexity of arrangement that could only lead to confusion; so that the system here adopted of an alphabetical order under certain broad headings (geographical in the section above-mentioned) is certainly the most judicious that could be adopted.

But with regard to Palæontology the case is different; and we hope that in future years Mr. Whitaker may be able to make a change in the treatment of this department of his work. In the present volume this section is divided into three subsections—the Palæontology of the Vertebrata, of the Invertebrata, and of Plants; and under each of these heads the various publications appear in the alphabetical order of their authors' names. Now, without for one moment denying the great importance of a digest even of this kind, we cannot but think that its value would be immeasurably increased if the subjects, or at least the new genera and species referred to, could be classified after the fashion of those in the 'Zoological Record.' These things *are* capable of being reduced to an intelligible system; and although doubtless the process would involve considerable labour, it seems to us that a method of carrying it out might easily be organized. The advantage to students of palæontology would be immense.

We trust that Mr. Whitaker and his excellent coadjutors will not think that these remarks are dictated by a mere carping spirit of criticism, bent upon discovering something to find fault with. No doubt there are people who would pronounce the nectar of Jupiter's best bin too sweet or too dry, or perhaps corked, and detect

false notes in the music of the spheres if they could hear it; but gentlemen of this amiable turn would probably inform Mr. Whitaker that his whole book was got up on a wrong principle, and overwhelm him with a recapitulation of what they regard as errors of omission and commission of the most formidable nature. Far from us be any such uncharitableness. To us the 'Geological Record,' as it stands, seems to be a work for which all naturalists are laid under a debt of gratitude to the editor and his *collaborateurs*; and in the few lines of criticism in which we have indulged upon one of its departments, we have been animated solely by the desire to see it rendered even still more useful during that long career which we sincerely hope lies before it.

*Deep-sea Researches on the Biology of Globigerina.*

By G. C. WALLICH, M.D. Svo. London: J. Van Voorst, 1876.

IN this pamphlet Dr. Wallich discusses in considerable detail the known facts in the life-history of the *Globigerinæ* and the inferences that have been founded upon them. He describes the various observations that have been made of the occurrence of these minute Foraminifera at great depths in the ocean, where their shells are now forming, in certain places, a chalk-like deposit of great extent—a circumstance which gives them a remarkable interest from a geological point of view. Quite recently the observations made by the naturalists of the 'Challenger' expedition have added considerably to this interest by leading them to the conclusion that not only limestones but ferruginous clays have been produced by these little creatures, which they suppose to be pelagic animals, living only in the superficial strata of the water, and sinking to the bottom after death, where their shells produce calcareous deposits at certain depths, whilst at greater depths the carbonate of lime forming the shells is dissolved before they reach the bottom, leaving only the small percentage of oxide of iron and alumina contained in them to form a deposit of red clay. That there are many difficulties connected with this view no one can deny; and Dr. Carpenter has endeavoured to get over these by a theory of his own, according to which the *Globigerinæ* actually live and breed at the bottom, but pass a portion of their lives at the surface of the ocean.

From the time of his researches in the 'Bulldog' in 1860, which first really demonstrated the occurrence of living organisms at great depths in the sea, Dr. Wallich has always maintained that the *Globigerinæ* forming the well-known "ooze" of the Atlantic seabed lived on the spots where they and their remains are found; but whilst he is no doubt much pleased at having Dr. Carpenter for once on his side, he does not by any means adopt that gentleman's opinions as to the whole history of *Globigerinæ*. Unlike Dr. Carpenter, he maintains that the spined *Globigerinæ* found abundantly at the surface of tropical seas have nothing whatever to do with those that form the deposits at the bottom: and it seems to us that the arguments adduced by him go very far towards proving, if, indeed,